

Amendments to the Drawings:

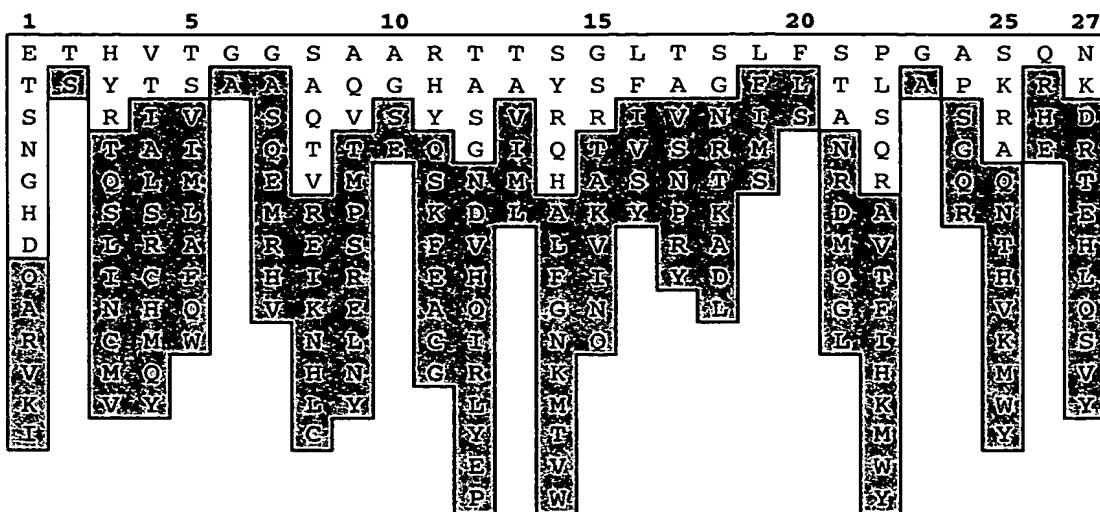
Enclosed are formal drawings.

Attachment: Replacement Sheets



Application No. 09/463,098
 Amdt. Dated Aug. 16, 2004
 Reply to Office Action of May 18, 2004
 Replacement Sheet

A



B

	1	5	10	15	20	25	27																			
Q	T	H	V	T	G	G	S	A	A	R	T	T	S	G	L	T	S	L	F	S	P	G	A	S	Q	N
T	T	T	V		V	Q	G	H	A	A	H	S	V	G		R	L	P	K	K						
R					Q	V	S	Q	V	R	R		R			S	S	Q		Q						

Fig. 1



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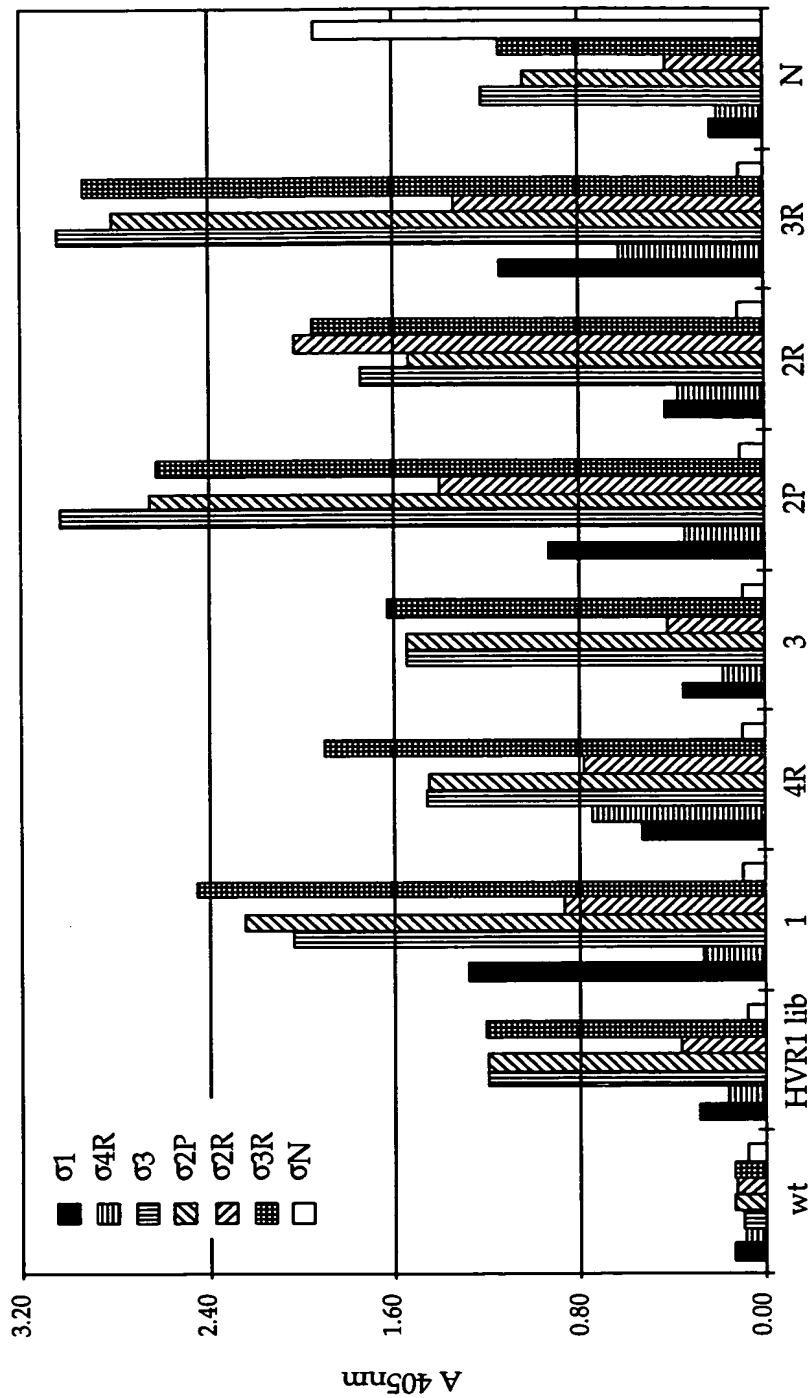


Fig. 2

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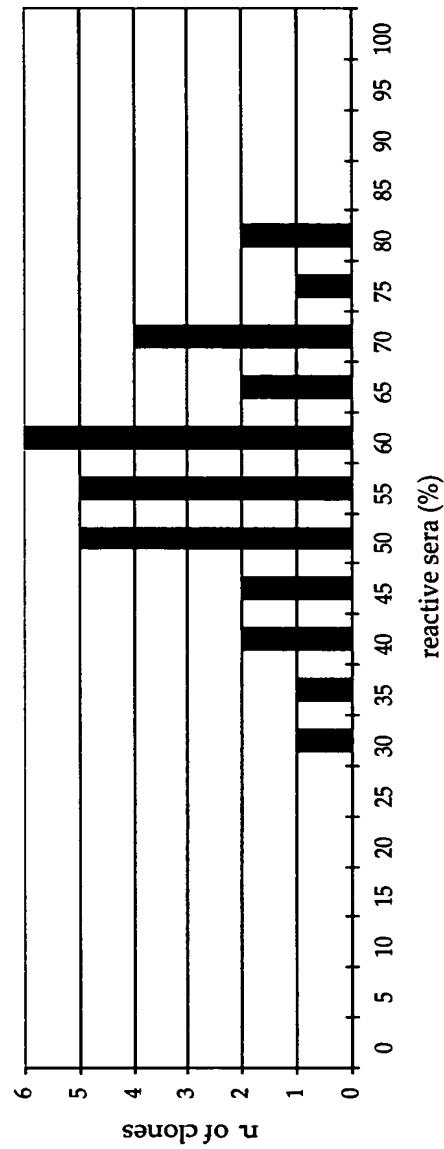
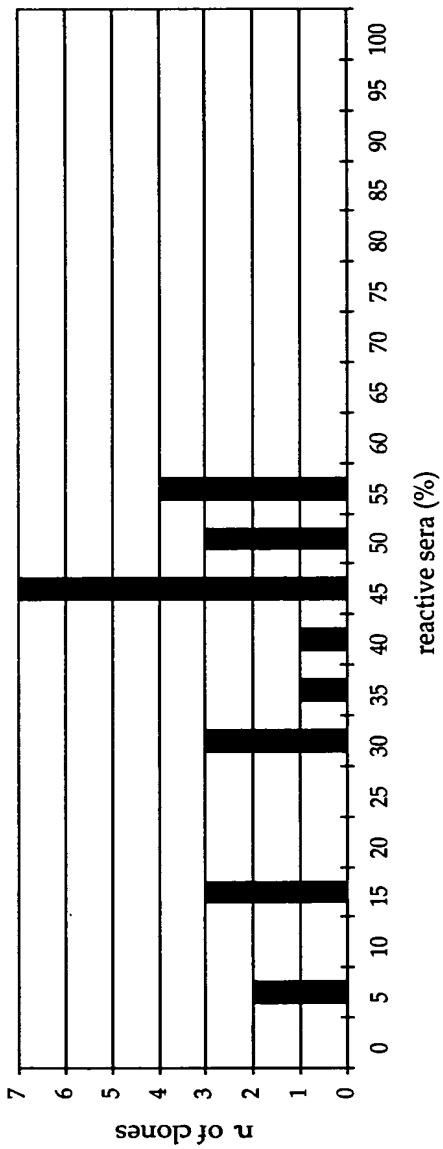


Fig. 3



Application No. 09/463,098
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A

	R9	H1	M63	M122
C7	0.14	0.13	0.00	0.22
C8	1.67	1.83	1.05	0.38
C9	2.30	0.65	0.21	0.11
C10	1.23	1.30	0.71	0.64
C12	0.16	1.26	0.20	1.09
C13	0.90	2.06	0.57	0.19
C14	0.47	0.63	1.09	2.27
C17	1.48	1.35	1.00	0.00
C23	0.00	0.88	2.65	0.00
C27	0.00	0.00	0.00	3.17
C28	2.98	0.15	0.00	1.98
C29	0.00	0.00	2.85	1.17
C30	0.18	0.00	2.85	1.17
C40	3.17	1.84	0.20	2.96
C48	3.07	2.58	0.00	2.56
C49	0.12	0.00	0.00	0.00
C50	0.00	0.00	0.12	0.00
C56	0.33	0.12	0.00	0.00
C58	2.85	1.42	0.38	0.35
C62	0.00	0.00	0.13	0.00

frequency 75% 70% 70% 70%

total:
100%

B

	R9	H1	M63	M122
1V	0.49	2.51	0.00	0.20
2V	0.00	0.19	0.11	0.00
3V	0.65	1.90	1.73	0.62
4V	0.25	0.00	0.00	0.29
5V	1.75	2.47	0.31	0.00
7V	0.60	1.09	1.16	0.88
8V	0.30	0.88	0.00	0.00
9V	0.00	0.59	0.00	0.00
10V	0.58	0.11	1.98	0.00
1P	0.00	0.00	0.00	0.33
5P	0.24	0.28	0.44	0.00
6P	0.47	1.54	0.27	0.31
7P	0.78	1.33	1.00	0.00
8P	0.68	0.57	0.14	0.38
10P	1.20	1.12	0.81	0.88
11P	0.32	0.44	0.00	0.22
12P	1.50	1.08	0.84	0.90
13P	0.49	0.00	0.00	0.31

frequency 83% 83% 61% 61%

total:
100%

C

	R9	H1	M63	M122
X1	0.00	0.00	0.00	0.00
X2	1.37	0.17	0.21	0.68
X3	0.15	0.56	0.38	0.00
X4	0.00	0.00	0.00	0.00
X5	0.00	0.14	0.00	0.00
X6	0.25	0.00	0.00	0.31
X7	0.66	0.83	0.60	0.34
X8	1.04	1.31	0.98	0.45
X9	0.96	0.21	0.00	0.00
X10	0.00	0.00	0.00	0.00
X11	0.74	0.33	0.11	0.91
X12	0.00	0.00	0.00	0.00
X13	2.30	0.18	0.54	0.00
X14	1.20	0.00	0.00	0.00
X15	2.38	0.00	0.00	1.60
X16	1.92	2.30	1.86	2.19
X17	0.00	0.00	0.00	0.00
X18	0.00	0.00	0.00	0.00
X19	0.00	0.00	0.00	0.00
X20	0.47	0.33	0.26	0.00
X21	0.00	0.86	1.45	1.96
X22	0.37	0.44	0.44	0.12
X23	0.61	0.60	0.10	0.00
X24	0.00	0.00	0.80	0.73
X25	0.00	0.00	0.00	0.47
X26	0.00	0.00	0.00	0.00
X27	0.00	0.00	0.00	0.00
1NV	0.00	1.50	0.22	0.00
2NV	0.00	0.40	0.23	0.00
3NV	0.10	0.11	0.00	0.00
4NV	0.00	0.00	0.00	0.00
5NV	0.00	0.00	0.00	0.00
6NV	0.00	0.00	0.00	0.00
11NV	0.10	0.00	0.00	0.53
12NV	0.00	0.00	0.41	0.00
13NV	0.00	0.00	0.00	0.00
15NV	0.12	0.00	0.00	0.19
16NV	0.52	0.84	0.36	0.60
17NV	0.64	0.52	0.41	1.14
3P	0.00	0.00	0.00	0.00
4P	0.00	0.00	0.00	0.00

frequency 46% 44% 41% 37% total: 63%

Fig. 4

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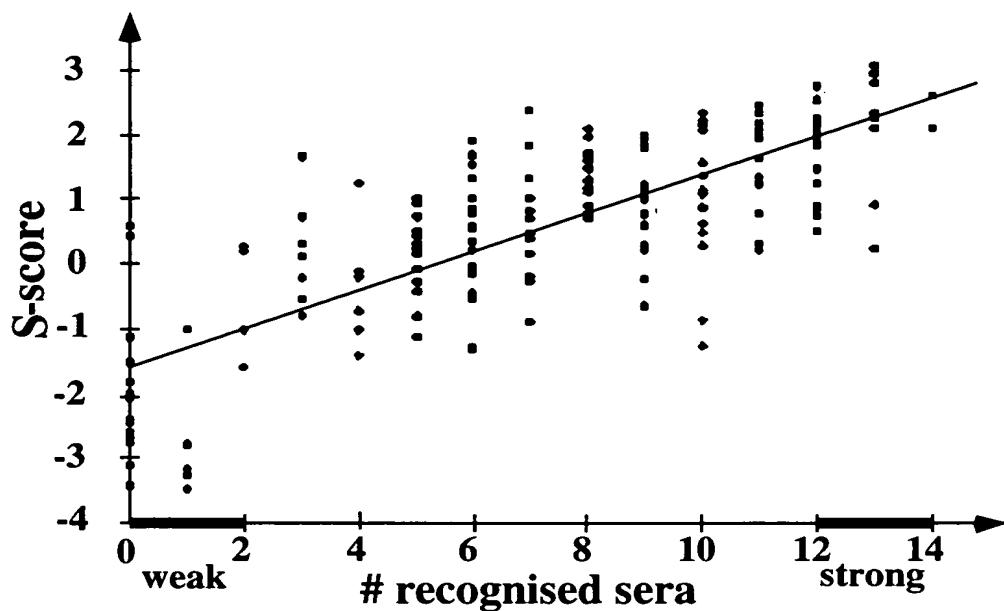


Fig. 5



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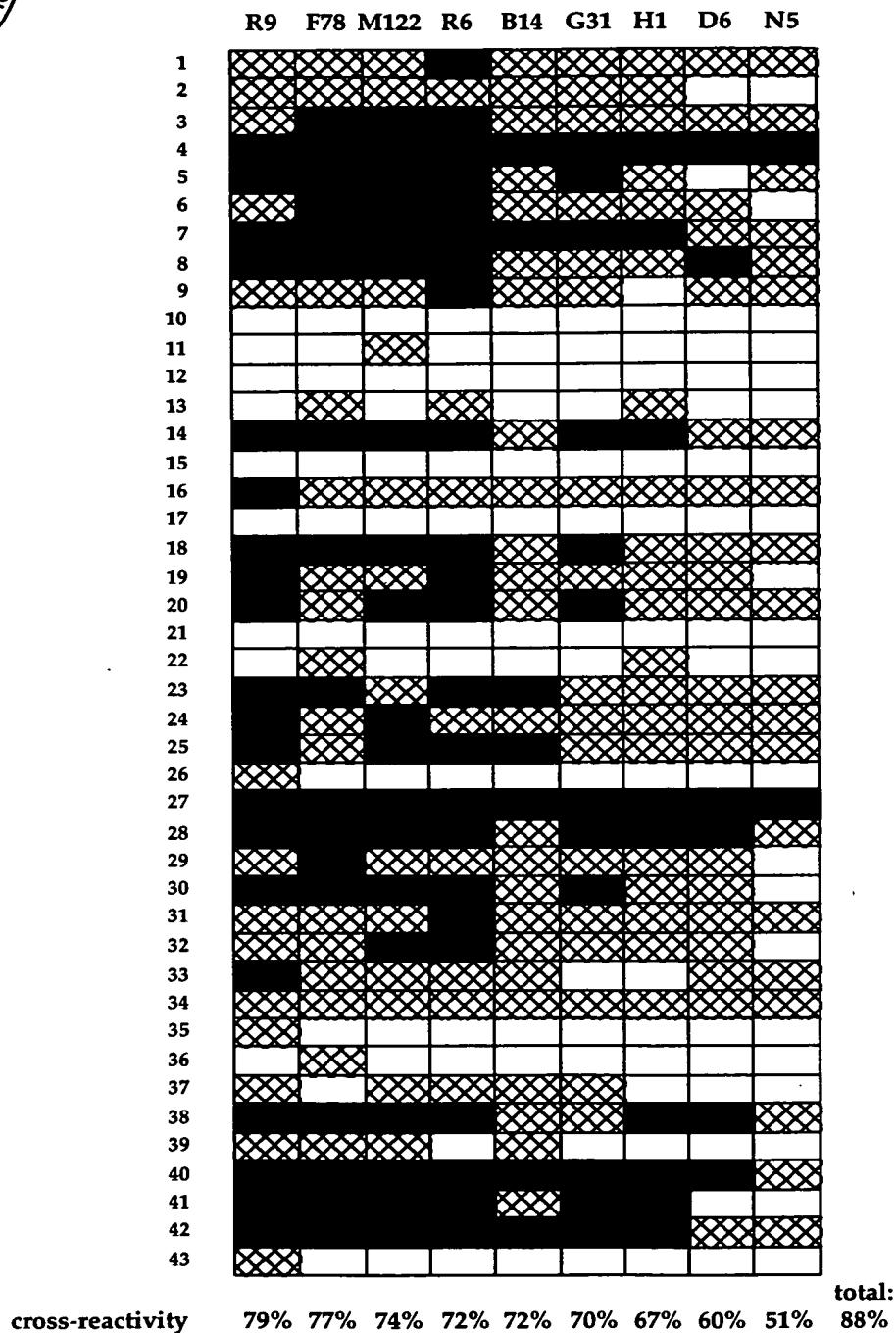


Fig. 6



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A

mimotope	sequence
N5	TTTTTGGVQGHTTRGLVRLFSLGSKQN
R6	TTTTTGQQVGHQTSGLTGLFSPGAQQN
D6	QTTTTGGQVSHATHGLTGLFSLGPQQK
R9	QTTVVGGSQSHTVRGLTSLFSPGASQN
H1	QTHTTGGVVGHATSGLTSLFSPGPSQK
G31	TTHTVGGSVARQVHSLTGLFSPGPQQK
M122	QTTTTGGSASHAVSSLTGLFSPGSKQN
B14	QTTVTG-QASHTTSSLTGLFSPGASQK
F78	QTHTTGGQAGHQAHSLTGLFSPGAKQN

B

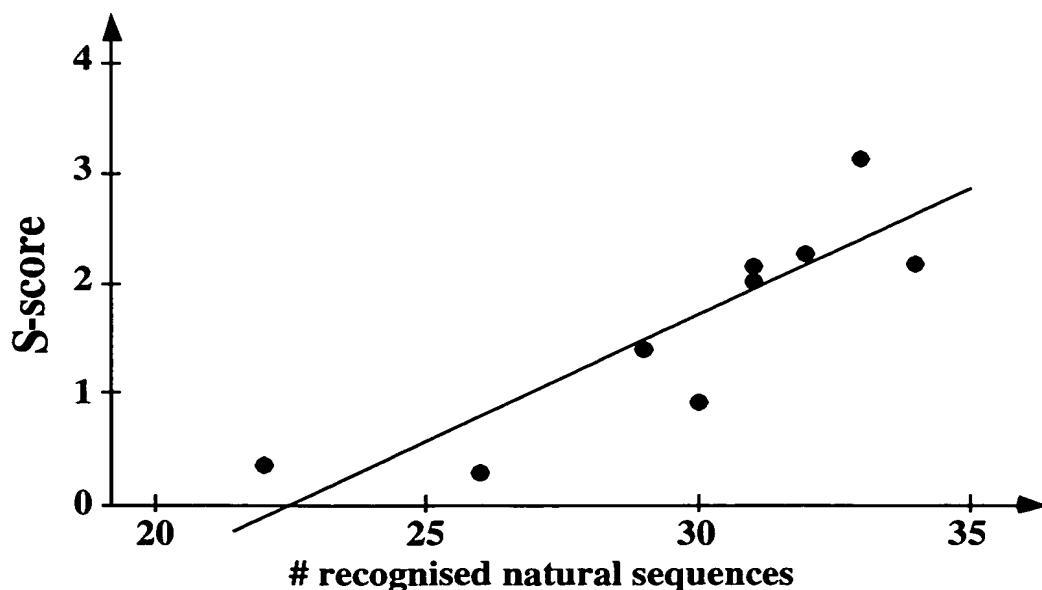


Fig. 7

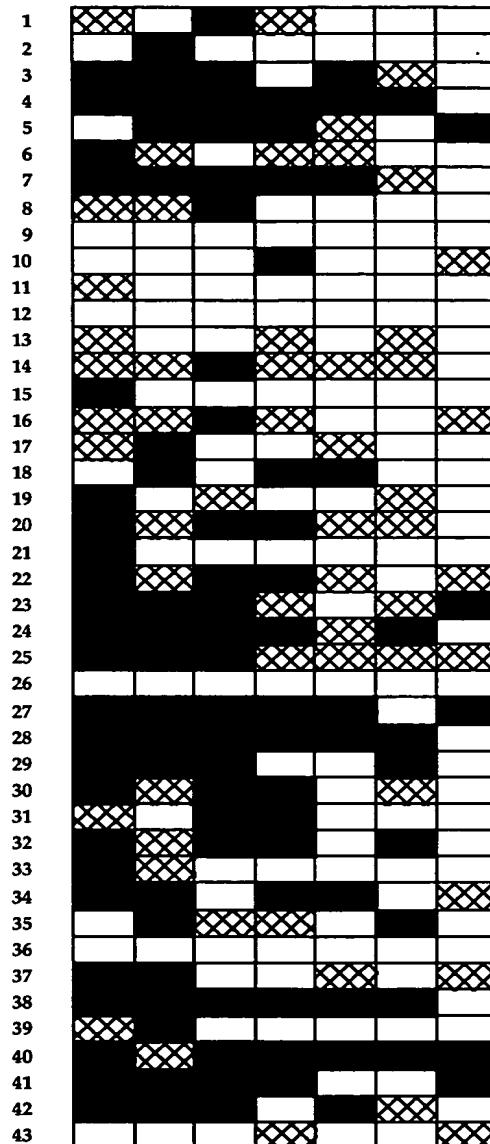


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A

mimotope G31 F78 R9 D6 M122 H1 NS

titre (x100) 330 1000 330 130 10 33 5



total:

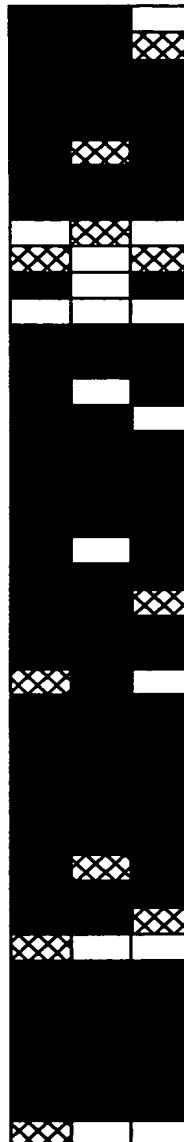
cross-reactivity 77% 70% 60% 60% 44% 42% 28%

91%

B

MIX3 MIX1 MIX2

45 25 30



95% 84% 84%

Fig. 8

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B14	QTTVT . GQASHTSSLTGLFSPGASQK
B24	TTTTVGGQASHTSSLTGLFSPGASQK
D6	QTTTTGGQVSHATHGLTGLFSLGPQQK
E19	TTHT . GGQQAHTTSRLVSLFSPGASQK
F78	QTHTTGGAQGHQAHSLTGLFSPGAKQN
G31	TTHTVGGSVARQVHSLTGLFSPGPQQK
H1	QTHTTGVVVGHATSGLTSLFSPGPSQK
M63	QTHTTGVVSHQTRSLLVGLFSPGPQQN
M122	QTTTTGGSASHAVSSLTGLFSPGSKQN
R6	TTTTTGGQVGHQTSGLTGLFSPGAQQN
R9	QTTVVGGSQSHTVRGLTSLFSPGASQN

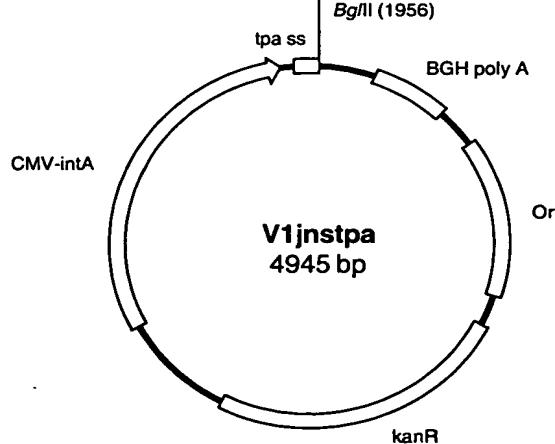
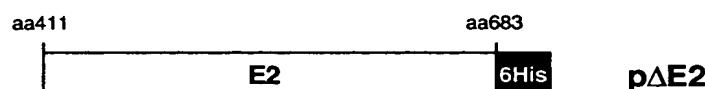
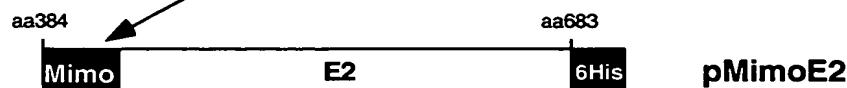


Fig. 9